

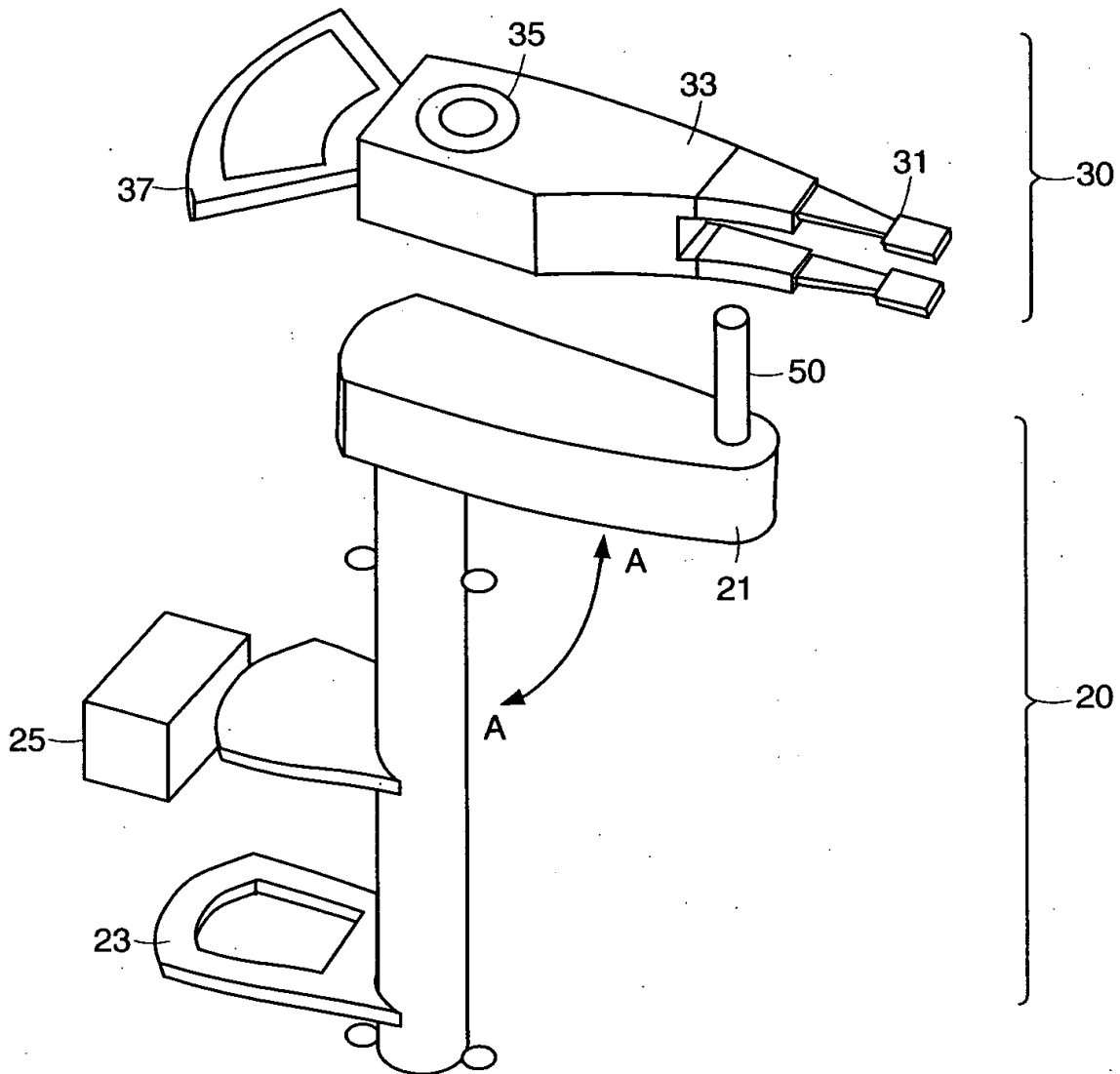
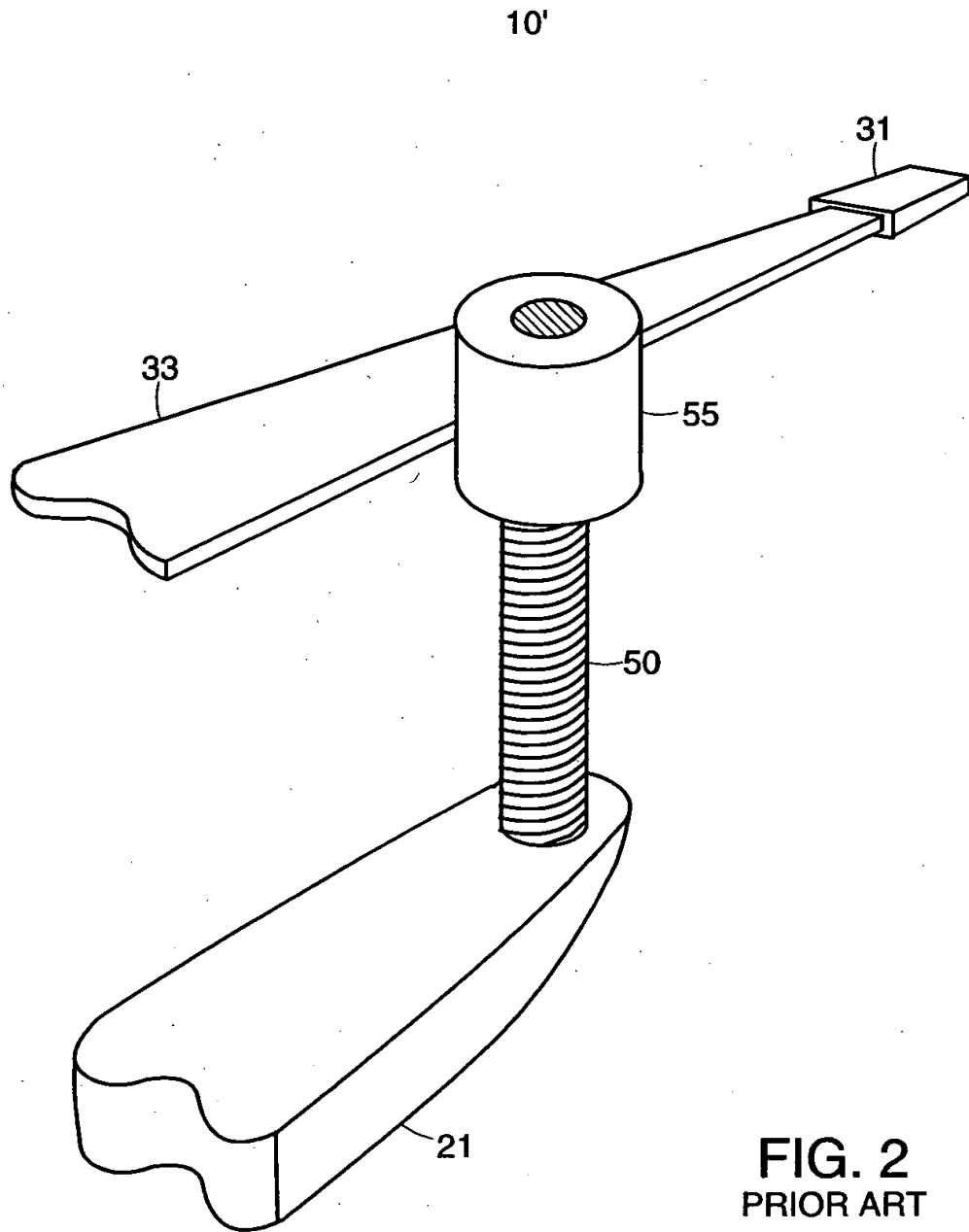
10

FIG. 1
PRIOR ART



1000-5745560

10a

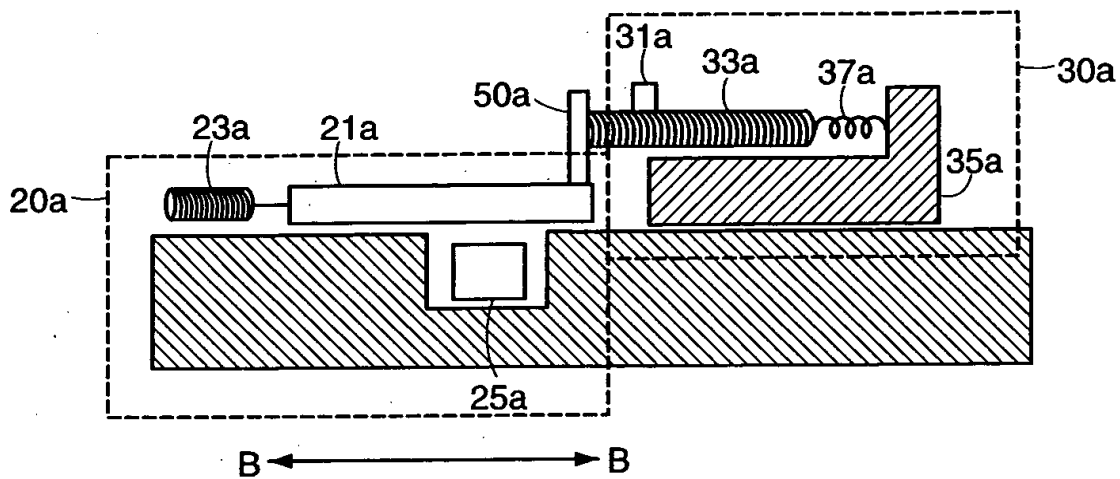


FIG. 3
PRIOR ART

10a'

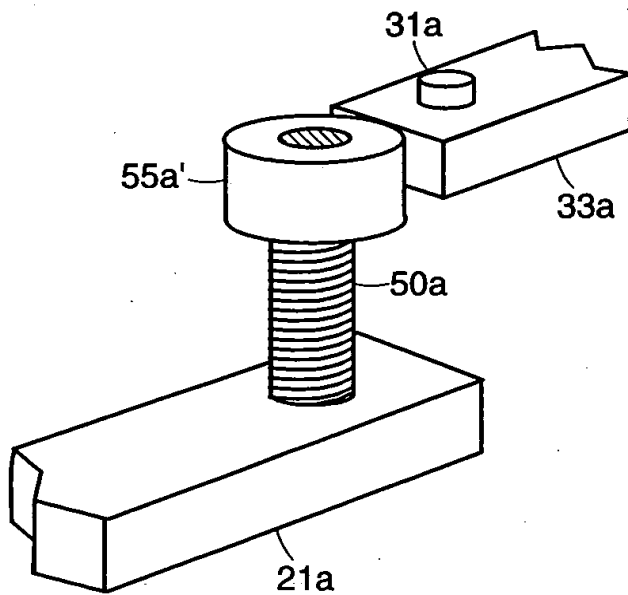


FIG. 4
PRIOR ART

100

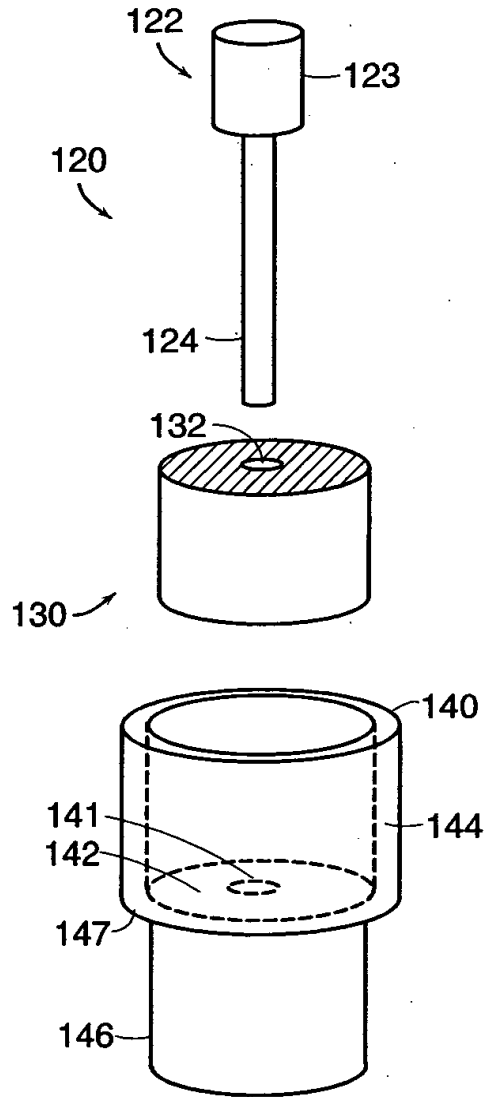


FIG. 5

100

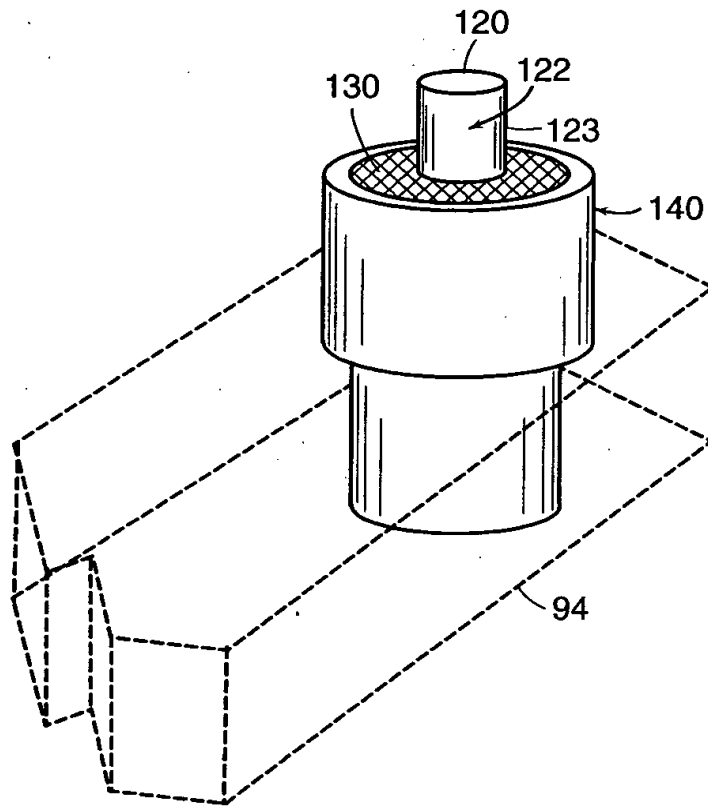


FIG. 6

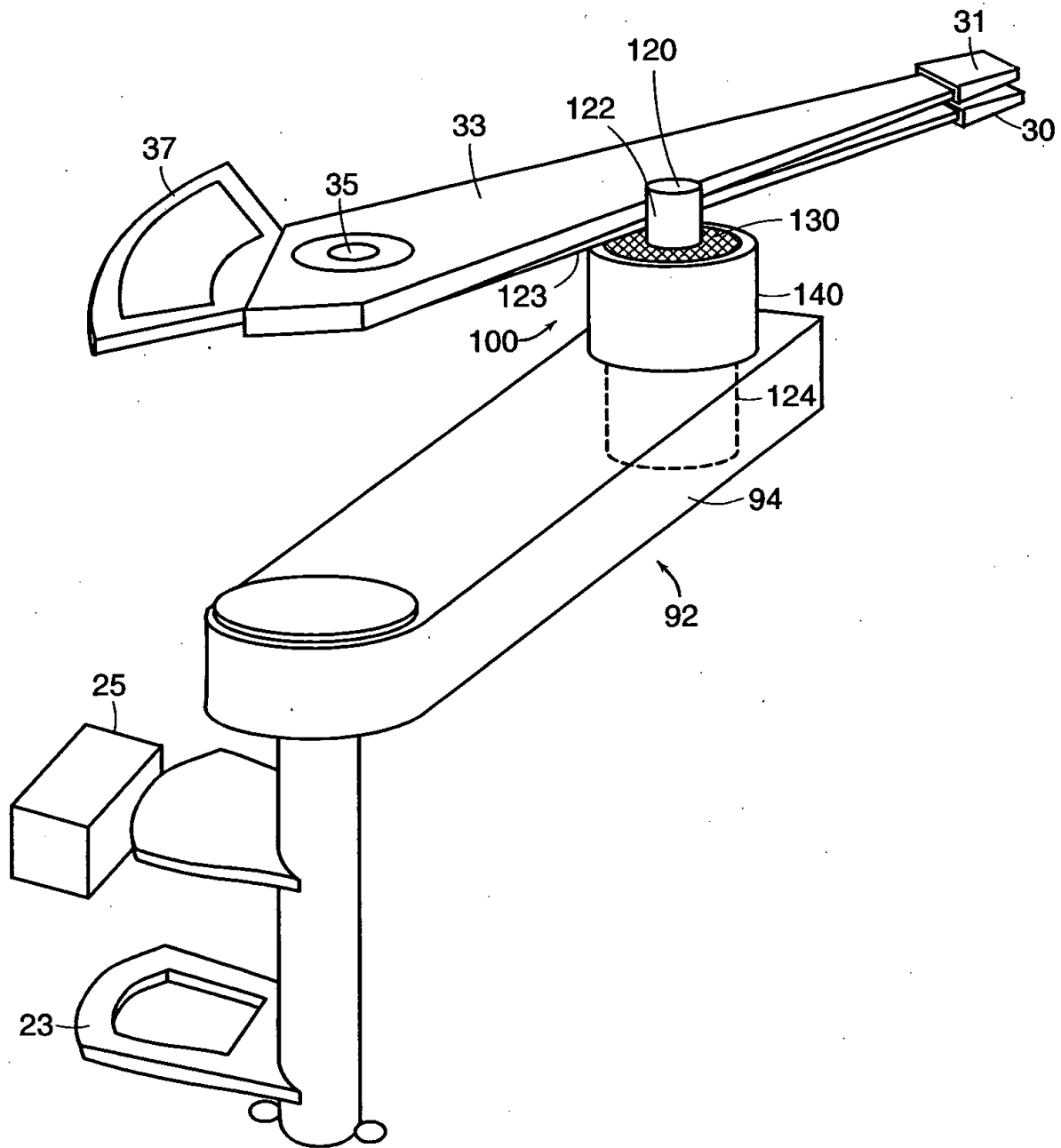


FIG. 6A

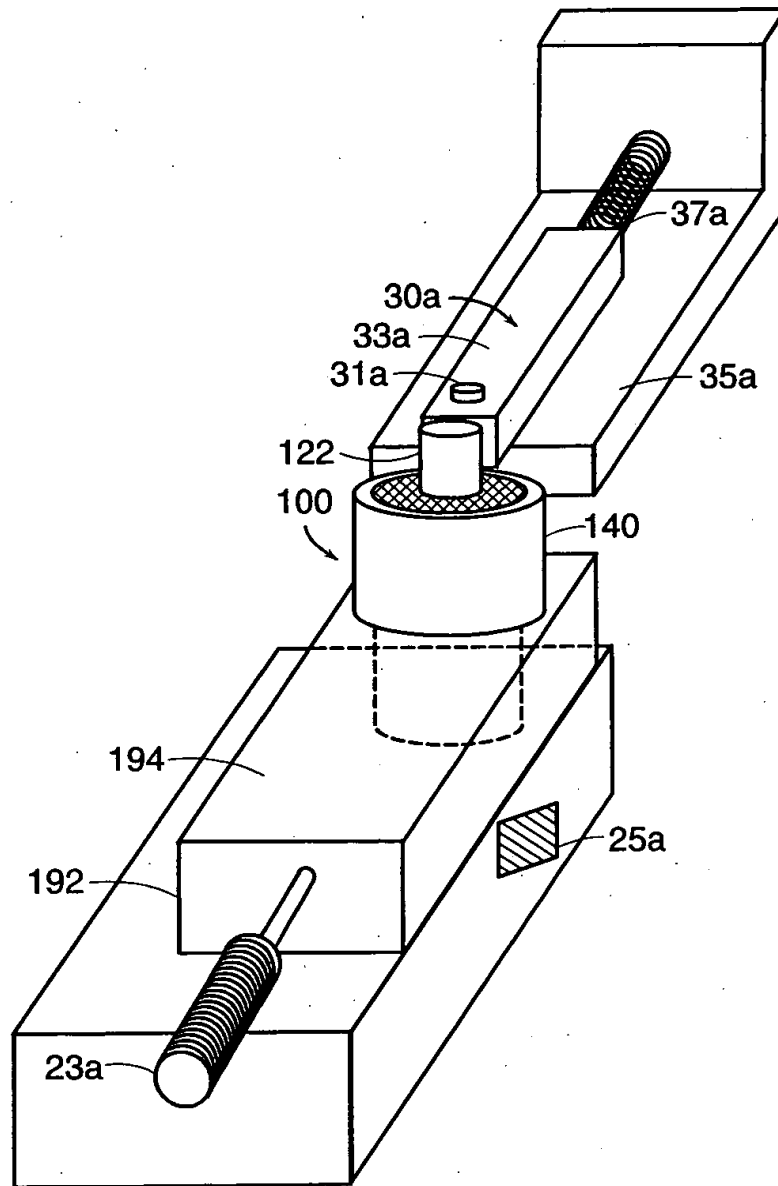
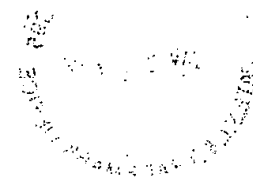
190

FIG. 6B



100

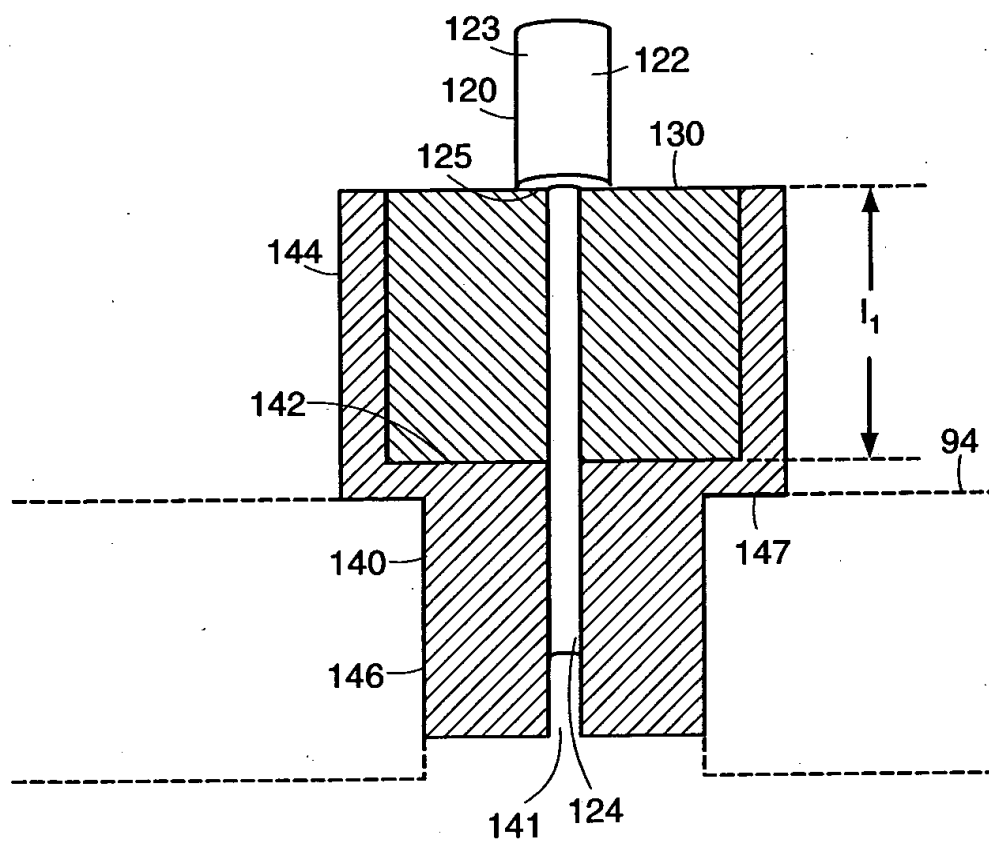


FIG. 7

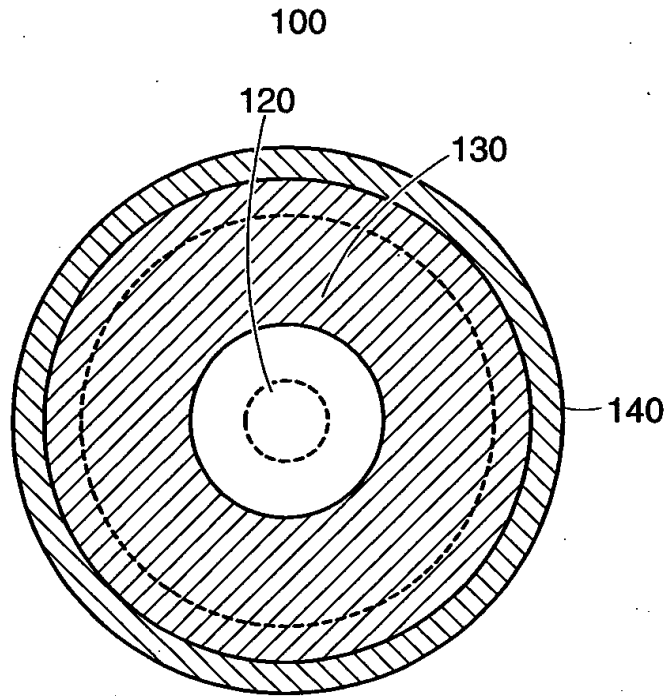
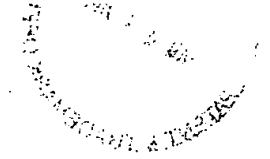


FIG. 8

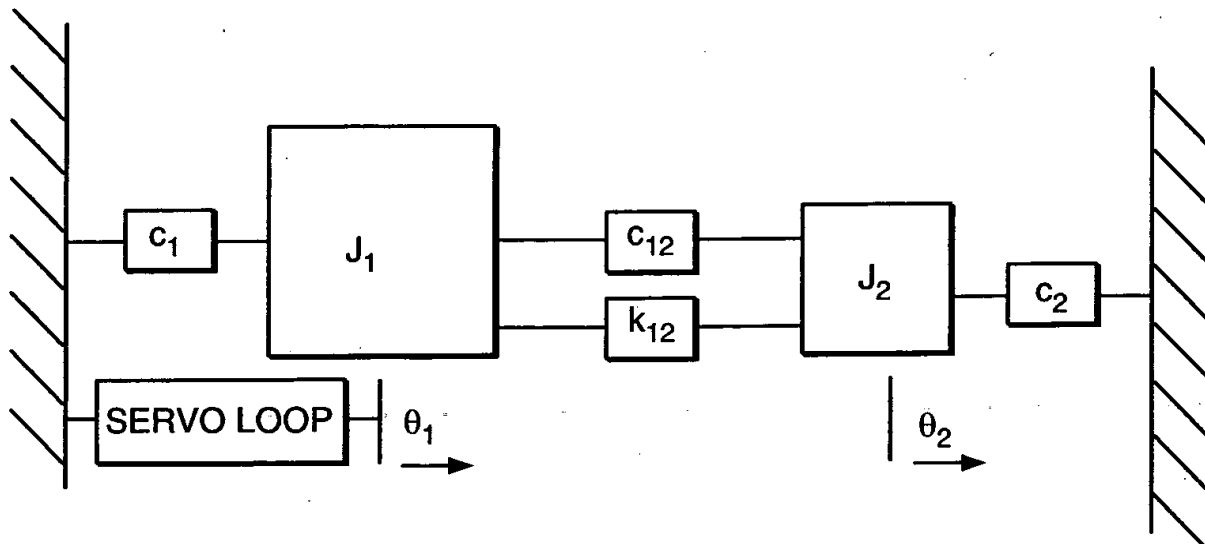
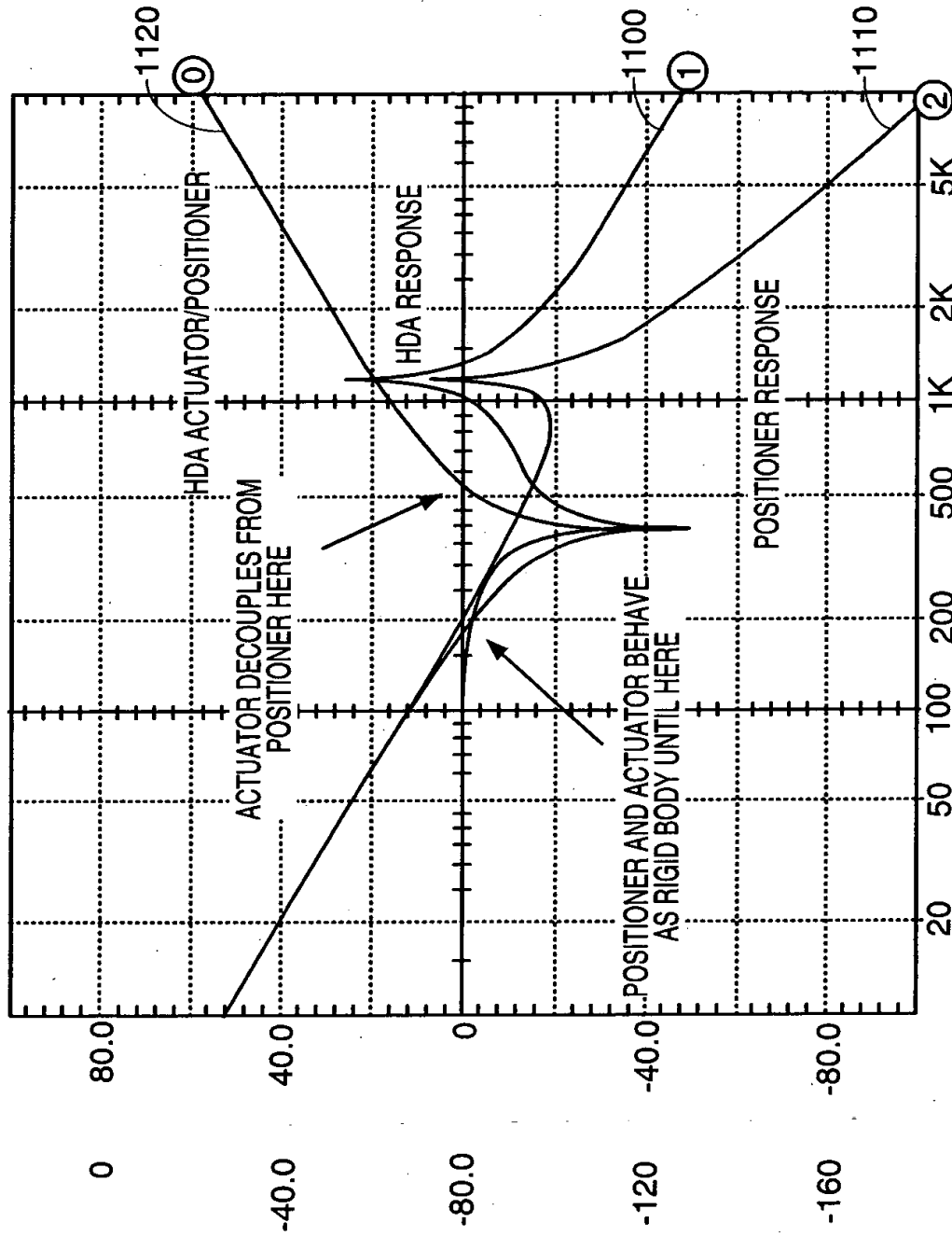


FIG. 9

200070-57155600

2000-07-06



FREQUENCY IN Hz

BODE RESPONSE WITH TORQUE DISTURBANCE AT HDA ACTUATOR

FIG. 10

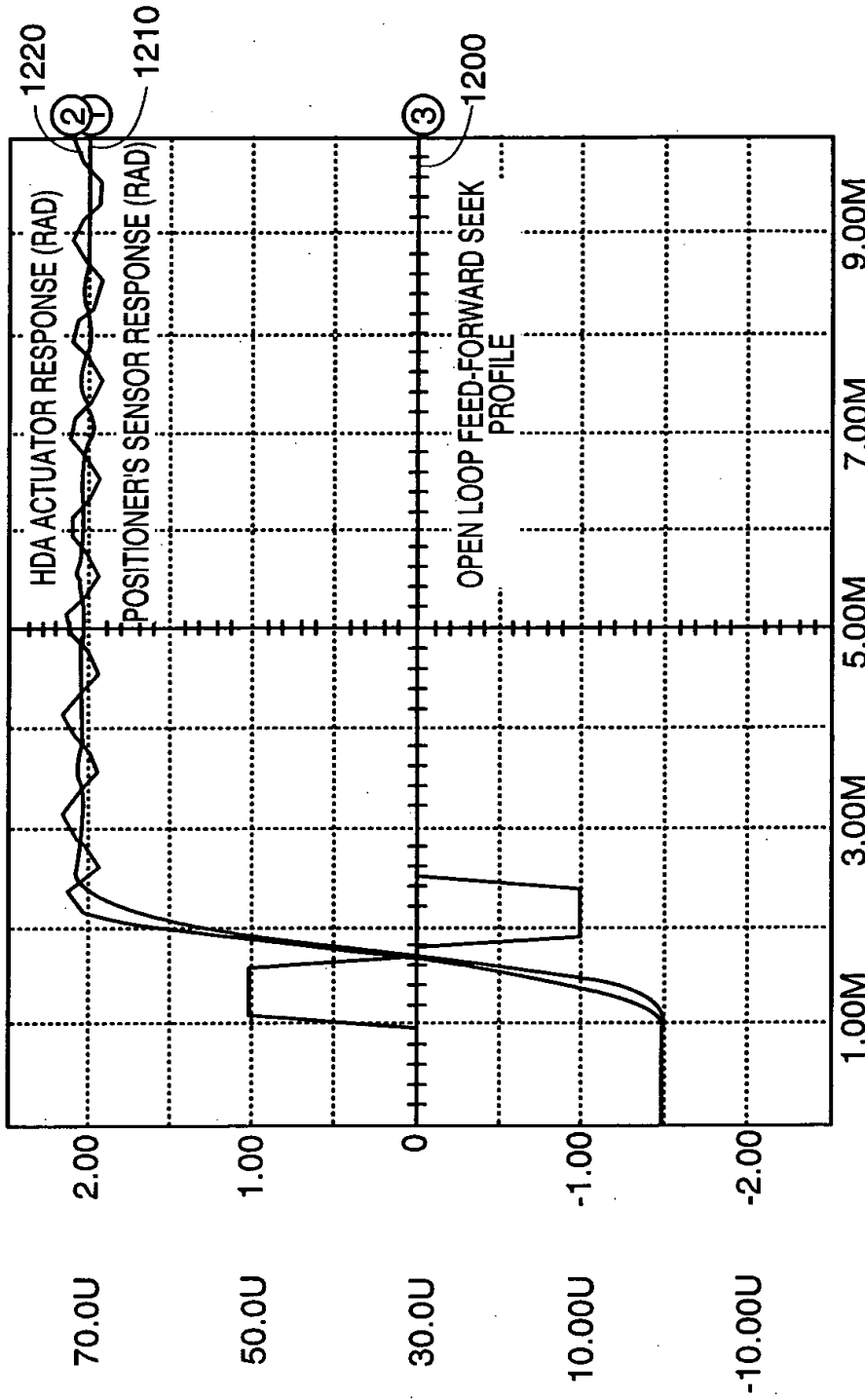
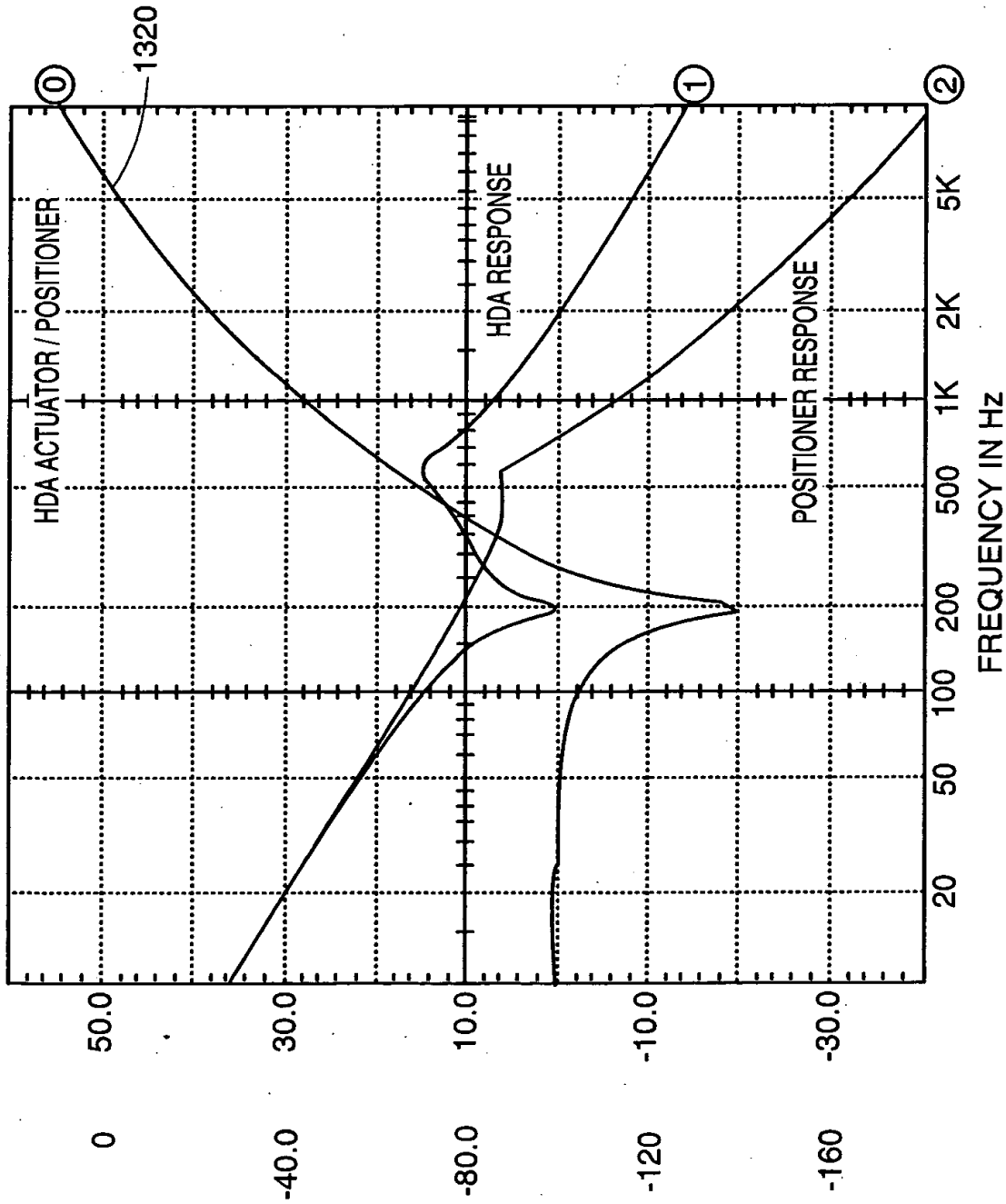


FIG. 11

POSITIONER AND HDA RESPONSE WITH BANG-BANG
SEEK PROFILE WITH STIFF PIN

200070-2715500



RESPONSE DUE TO TORQUE DISTURBANCE AT HDA ACTUATOR
WITH SOFT MATERIAL BETWEEN HDA AND POSITIONER

FIG. 12

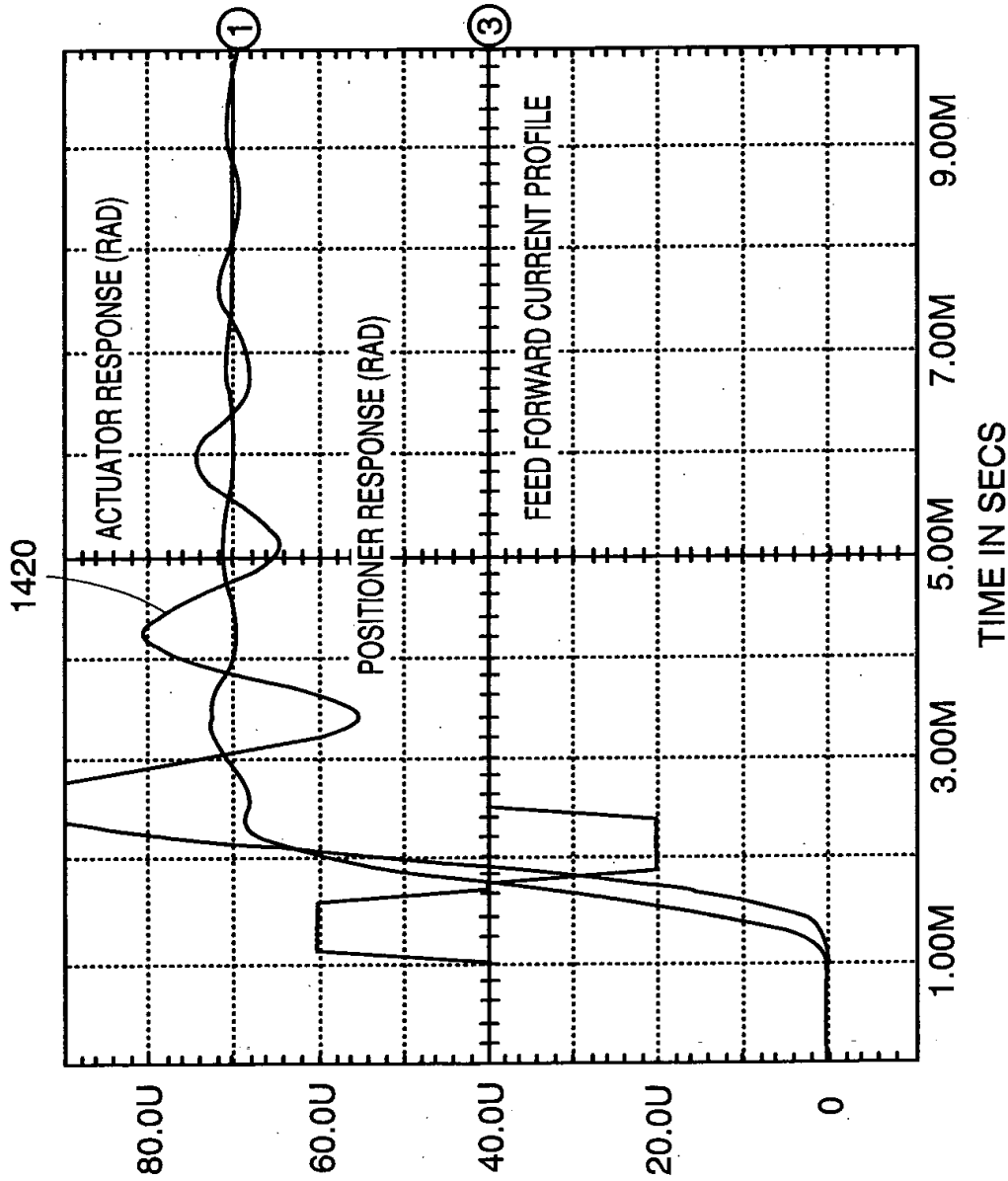
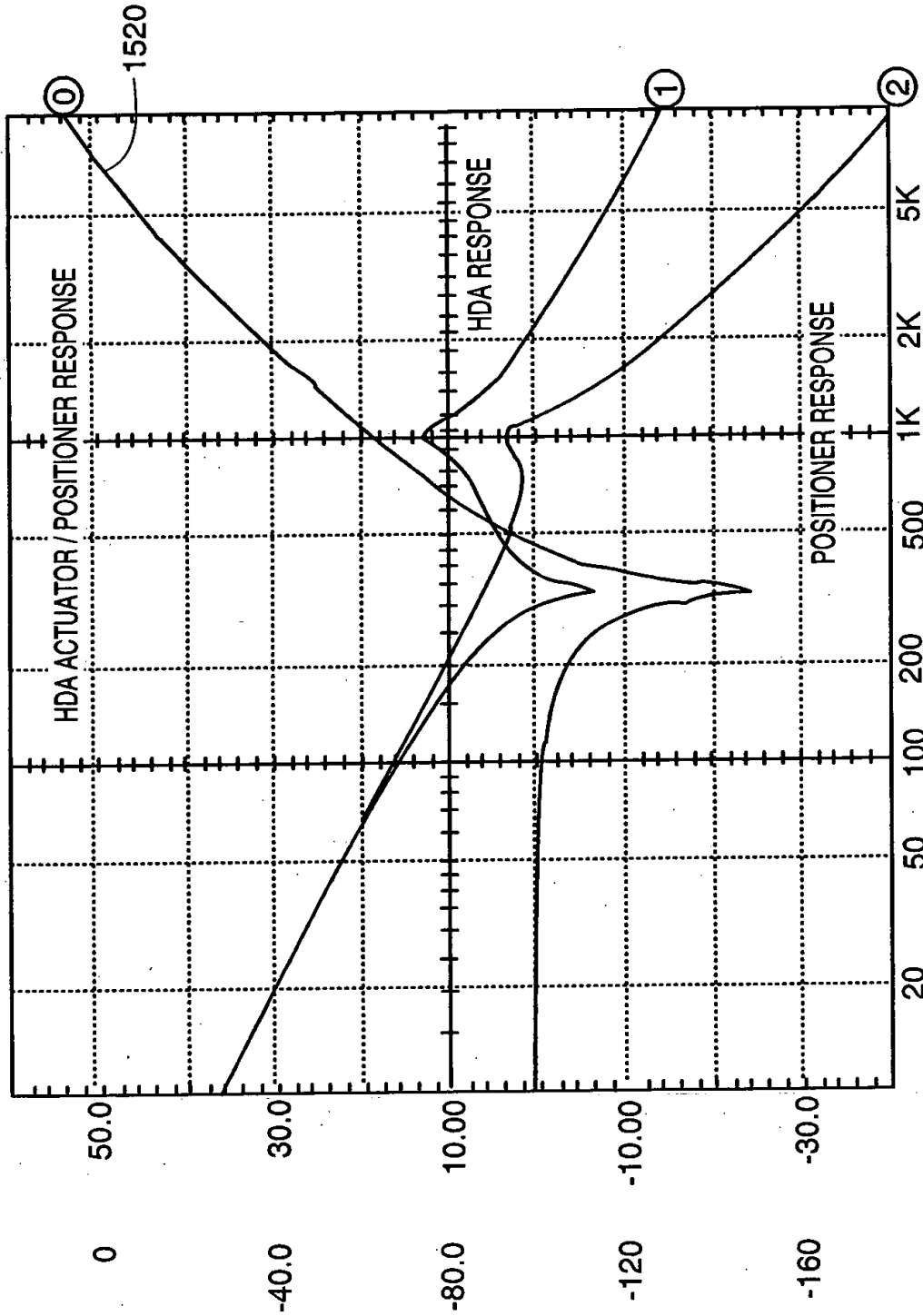


FIG. 13

ACTUATOR AND POSITIONER RESPONSE FOR STANDARD
BANG-BANG SEEK WITH SOFT MATERIAL

200070-571500



RESPONSE FOR TORQUE DISTURBANCE AT ACTUATOR WITH ENG PIN

FIG. 14

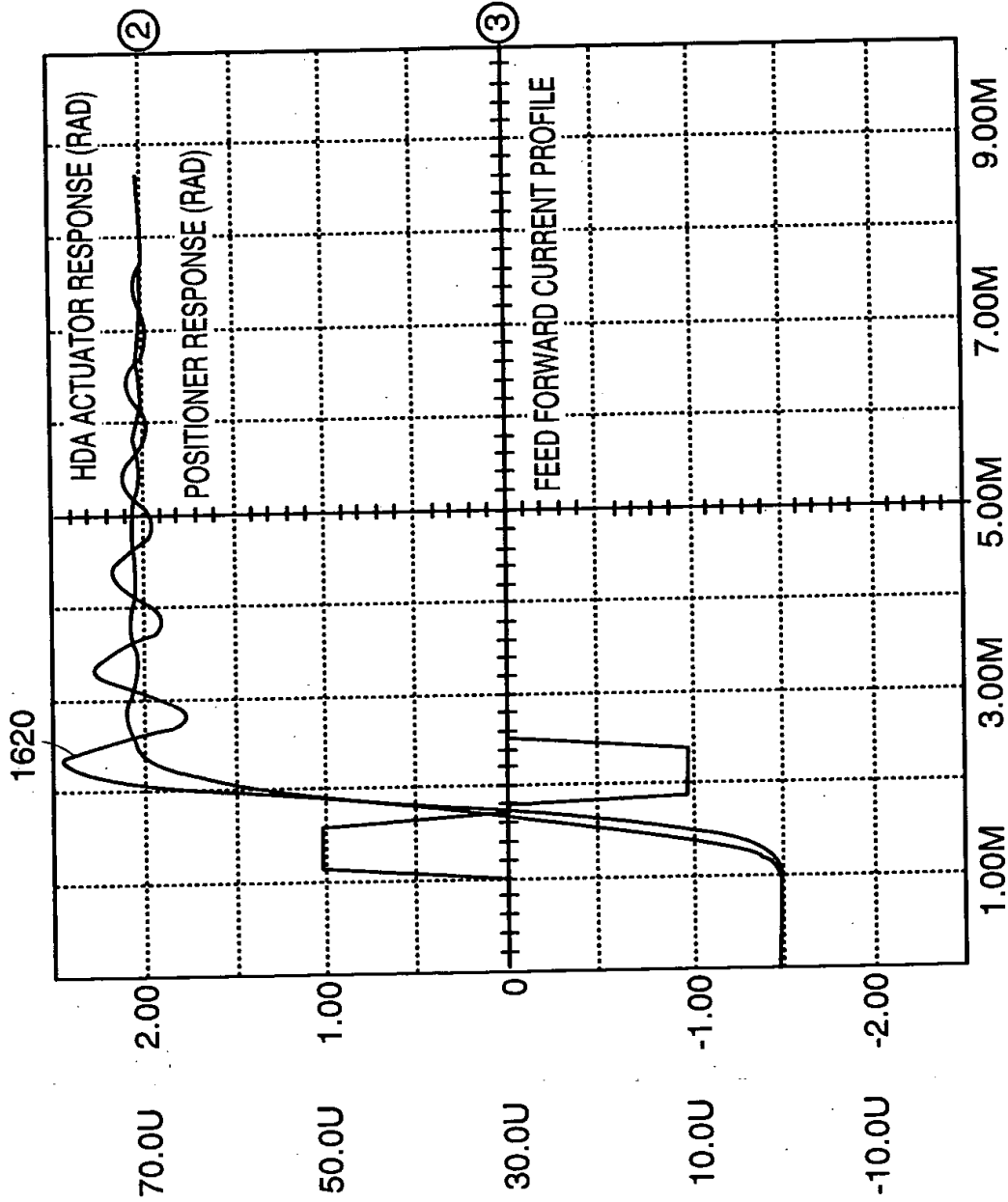


FIG. 15

POSITIONER AND ACTUATOR RESPONSE WITH ENGINEERED PIN

20070707 15:55:00

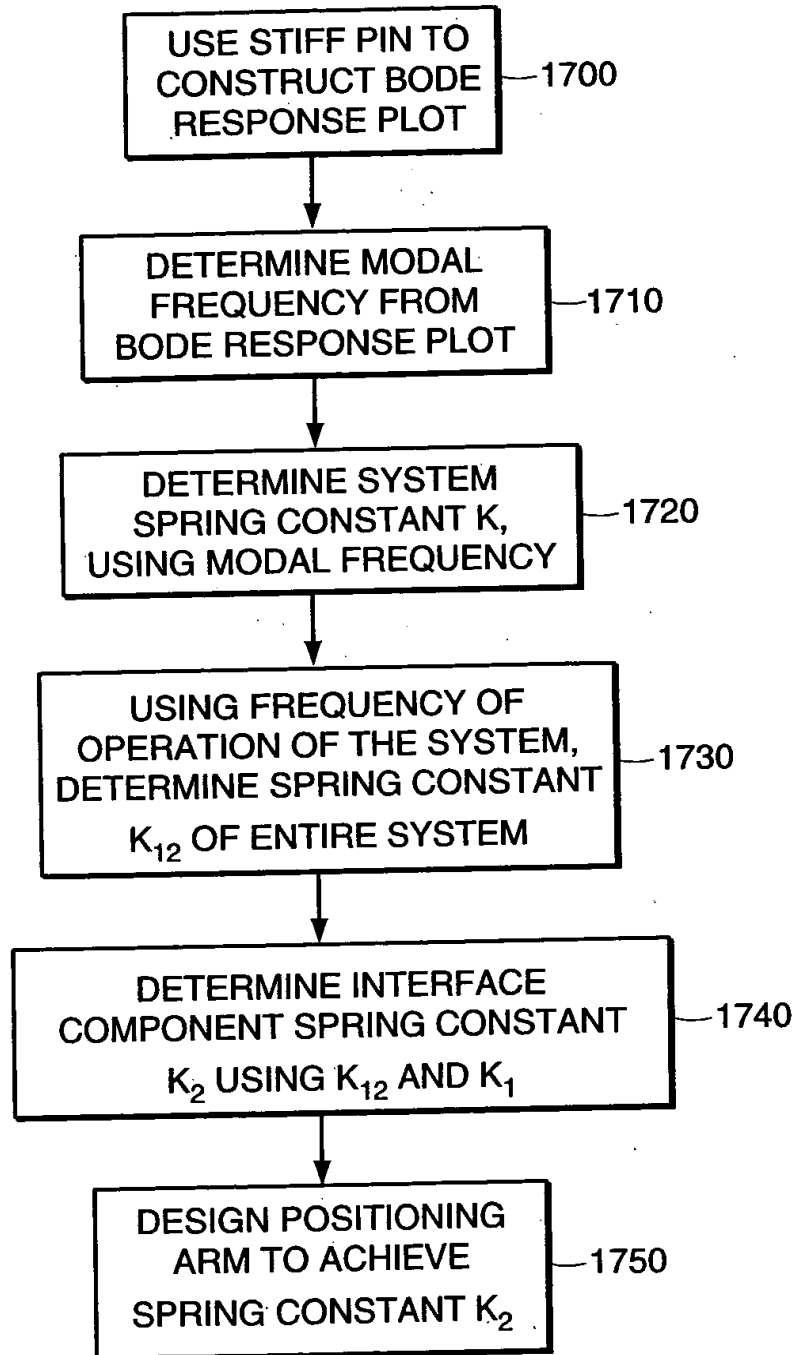


FIG. 16